



Missouri Department of Natural Resources

# Annual Compliance Report of Missouri Public Drinking Water Systems for 1999

Public Drinking Water Program  
P.O. Box 176  
Jefferson City, MO 65102  
(573) 751-5331

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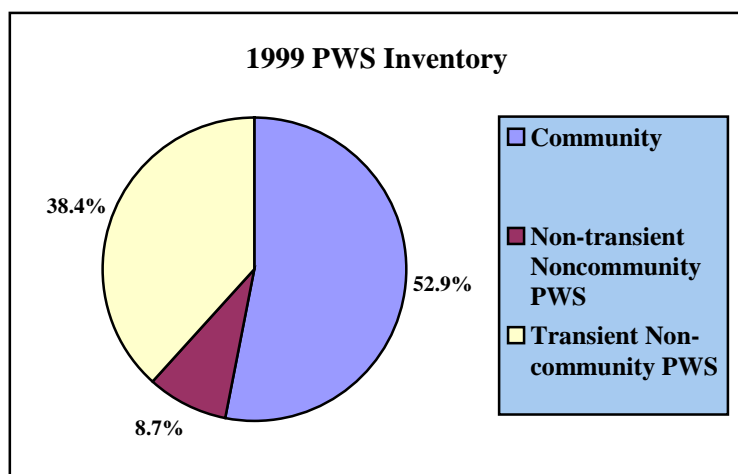
## **Introduction**

The amended federal Safe Drinking Water Act (SDWA) requires state agencies that are responsible for regulating public water systems to prepare and submit an annual report on public water system violations to the Environmental Protection Agency (EPA). The 1996 Annual Compliance Report was the first report required under the amended SDWA and this 1999 report is the fourth. Also as a requirement of the SDWA, EPA is to summarize and evaluate the states' reports in an annual national report, the next national report should be released around the end of the year.

EPA established the Public Water System Supervision (PWSS) Program under the authority of the Federal Safe Drinking Water Act, which allows states and territories to seek EPA approval to administer their own drinking water programs. The authority to run a PWSS Program is called primacy. To receive primacy, states must meet certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the federal regulations and a demonstration that they can enforce the program requirements. The Missouri Department of Natural Resources' (DNR) Public Drinking Water Program (PDWP) has had primacy since the late 1970's. The PDWP administers the federal standards and requirements in Missouri through equivalent state regulations.

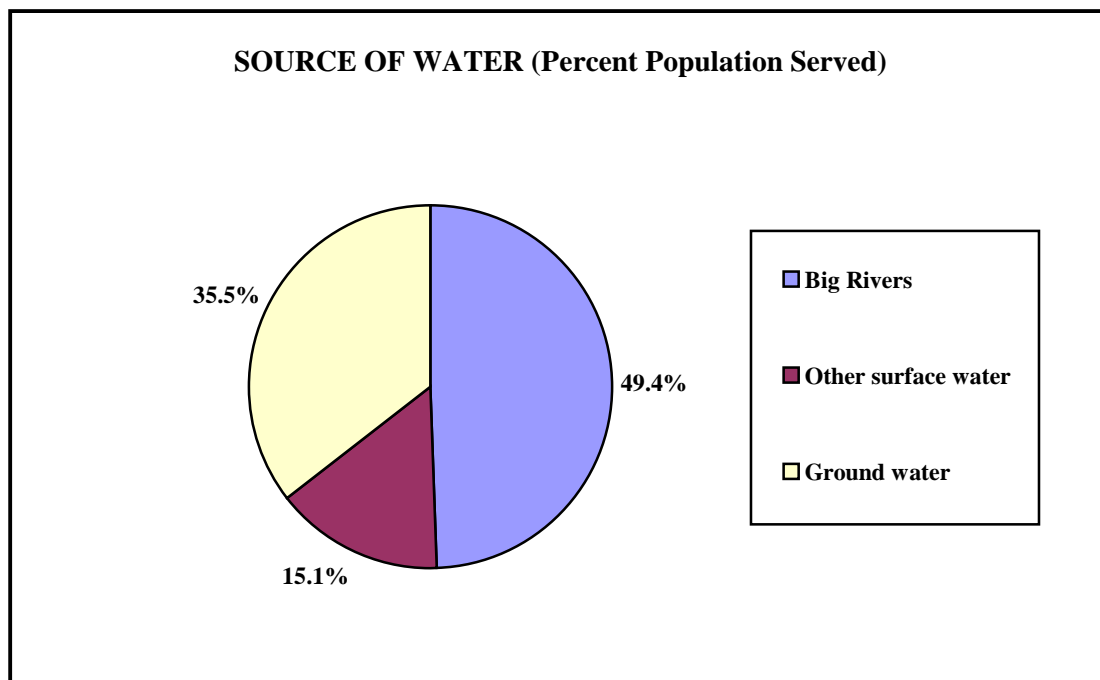
## The Missouri Public Water System Universe

A Public Water System (PWS) is defined as a system that provides water through piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. Water testing at systems serving fewer people than this is facilitated by local and county sanitarians and the Missouri Department of Health, rather than DNR. There are three types of PWSs. PWSs can be community (such as towns, subdivisions, or mobile home parks), non-transient non-community (such as schools or factories) or transient non-community systems (such as rest stops or parks). The requirements for construction, operation, monitoring, etc., vary among systems based on their type, size and source of water.



The time period covered by this Annual Compliance Report is calendar year 1999. In 1999, there were 2,734 active PWSs in Missouri. Of this total, 1,448 were community, 237 were non-transient non-community and 1,049 were transient non-community systems.

The community water systems in Missouri served approximately 4.7 million citizens in 1999. These citizens benefit from one of Missouri's most outstanding resources: its water. There is generally a good quantity of good quality water in Missouri. By far the largest source of water for Missourians was the Missouri and Mississippi River system. The abundant supply of water in these rivers and the proximity to the state's major population centers make the use of the big rivers as a source so popular. Ground water is the next most used source of drinking water for Missouri's community supplies. This is especially true in southern Missouri where good quality groundwater is easy to obtain and requires very little treatment to be used as a drinking water source.

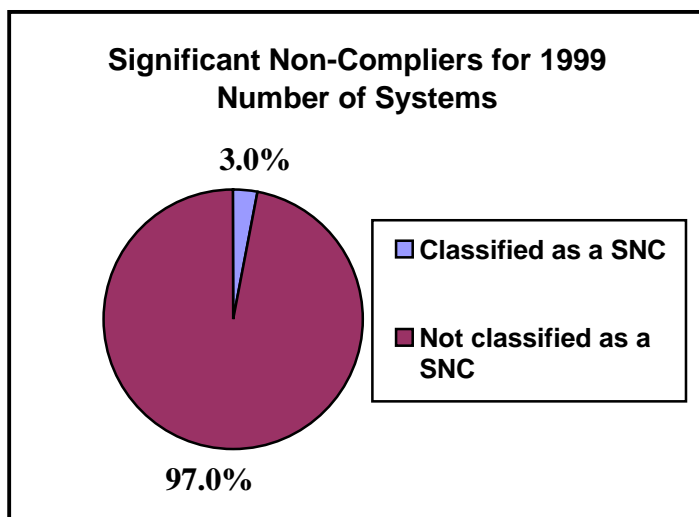


### **Analysis of Compliance by Public Water Systems in 1999**

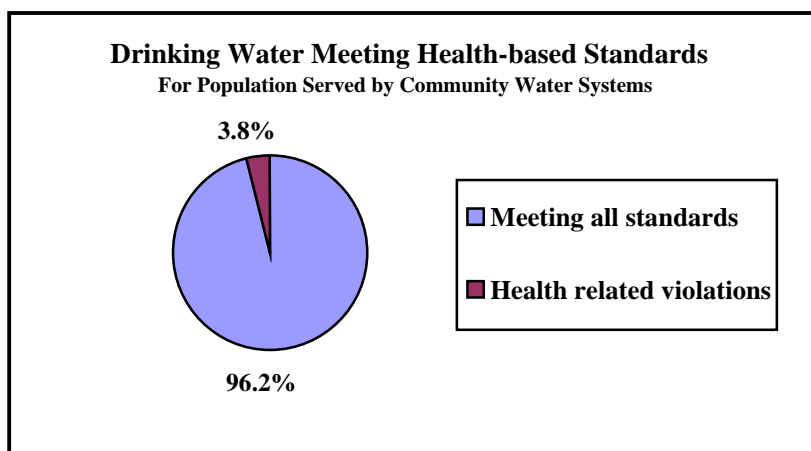
We expect a lot from our public water systems and require testing for as many as 90 different regulated chemicals and microbiological contaminants during the year. A system is to be applauded for performing all required testing and meeting all Maximum Contaminant Level (MCL) standards. Many public water systems perform testing beyond that required by the state.

The Summary of Violations tables are counts of individual violations. Because there are multiple regulations involved and some monitoring is on a monthly schedule, each Public Water System (PWS) has the potential to accumulate multiple violations during the year. For example, the monitoring requirements for the Total Coliform Rule alone create a potential for over 32,000 violations. This puts some perspective on the violation figures shown in the tables. Another factor is the number of systems that have violations. Many of the violations are from water systems with problems that result in multiple violations during the year while other systems may only have one or two violations. The department uses various methods to focus in on the water systems that need attention.

DNR and EPA use a process called Significant Non-Compliers or SNCs to focus attention on the water systems with problems that are considered significant. These are the systems with serious violations potentially affecting public health or multiple monitoring violations.

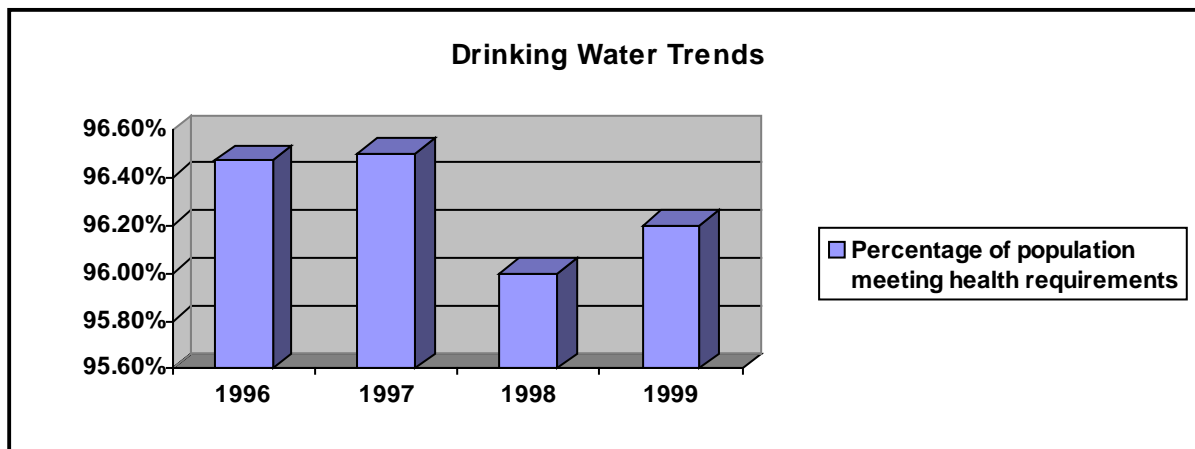


During 1999 there were only 83 systems on the SNC list. That means that 2,651 of the 2,734 PWSs in Missouri were not significant violators.



The violations representing the most potential impact on public health (MCLs and treatment techniques) were identified in only a small number of the public water systems.

The percentage of the population served by community water systems that meet all of the health-based standards is already above the national target of 95% set by EPA for 2005. Since 1996, when the first Annual Compliance Report was produced the results for Missouri are consistently above this target even though they may vary slightly from year to year. While we can probably never reach 100%, PDWP works closely with water systems to make sure any contamination incidents are addressed quickly and that long term solutions are put in place to protect the health of Missouri's citizens.



The vast majority of MCL and monitoring violations were for failure to meet the requirements of the Total Coliform Rule. Total coliform bacteria serve as an indicator that disease-causing organisms may be present. All public water systems in the state must test for this type of bacteria every month they dispense water to the public. PDWP is pleased to report a reduction from 1998 to 1999 in both monitoring and MCL violations: Major monitoring violations declined 12% (from 1,140 to 1,006). MCL violations for total coliform bacteria decreased 22% (from 551 to 430). Acute MCL violations for fecal coliform/*E. coli* decreased 48% (from 81 to 42). Although weather conditions may have contributed somewhat to the elevated numbers of violations in 1998, ongoing compliance and technical assistance activities by the department have largely been responsible for the reduction in violations from 1998 to 1999.

A number of systems missed collecting samples for one or two months; relatively few systems missed sampling for three or more months. See the Appendix B list for significant monitoring violations.

The phrase “know before you go” can apply to domestic as well as foreign travel, as compliance with drinking water regulations was significantly worse than average for transient non-community systems, so named because they do not typically serve the same people on a daily basis. This type of water system includes restaurants, resorts and campgrounds with their own wells. Transient non-community systems in 1999 accounted for 38 percent of all water systems in the state, but had 49 percent of the MCL violations for total coliform bacteria, 59 percent of the acute violations for fecal coliform or *E. coli*, and 62 percent of major monitoring violations.

Water districts, a type of community system, had as a group a record much better than average. In 1999, water districts accounted for 9 percent of all public water system in the state, but had only 3 percent of the MCL violations for total coliform bacteria, none of the acute violations for fecal coliform or *E. coli* and 1 percent of the major monitoring violations.

Thirty-eight out of the 2734 public water systems in the state had a total of 42 acute violations for fecal coliform or *E. coli* in 1999. So while these acute violations can be serious, they are rare. Additional good news is that for most of these violations, there were no reports of illness. A possible reason for this is that microorganisms were not present in large enough numbers to cause infection in most people.

Some people, however, may be more vulnerable to water-borne illness than the general population. To educate the public on this issue, all community water systems are required by July 1, 2000 to make their second Consumer Confidence Report (covering calendar year 1999) available to customers by July 1, 2000. Each report must include the following warning: “Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and the Centers for Disease Control (CDC) guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.”

Much of the Annual Compliance Report contains statistics and summary information with some detailed listings of violations for 1999. In addition to this statewide analysis of the compliance of public drinking water systems, most people can now receive specific information about their own water system. Starting with the report for 1998, each community water system now prepares what is commonly called a Consumer Confidence Report (CCR). The CCR provides information about the source of drinking water, contaminants detected in drinking water testing, violations of state and federal requirements and general information about drinking water and health. Customers of larger water systems had an individual report mailed to them or saw the CCR published in the local newspaper. Smaller water systems may have posted the CCR in their office or public building. Over 90% of the state's community water systems complied with the first year's CCR requirement. Anyone can request a copy of their CCR from the public water system or DNR PDWP.

### **Compliance Activities - Preserving the Quality of the Drinking Water**

DNR works closely with violators to return them to compliance in a timely manner. This includes phone contacts, on-site inspections, meetings with owners or operators and technical assistance as needed. For the more serious violations, a bilateral compliance agreement between the water system owner and DNR is the tool generally used to move the system back into compliance. Should a water system fail to meet the provisions of that agreement or continue to violate drinking water regulations, more formal enforcement actions, such as legal action through the courts, may become necessary. The following formal actions in 1999 represent action on more serious problem systems.

Bilateral Compliance Agreements signed	72
Cases referred to the Attorney General	7
Settlement Agreement/Judgements	6
Cases Pending at End of 1999	12

DNR also provides training and technical assistance to try to prevent the occurrence of microbiological violations. Training is routinely provided to operators and owners of public water systems around the state, primarily concentrating on the basic principles of running a water system and avoiding microbiological contamination of the system. Technical assistance in the form of phone contacts and on site visits is also provided routinely or upon request to help water system operators avoid or correct problems. Most of these activities are carried out by staff in the six Division of Environmental Quality regional offices. The following highlights from the regional offices for fiscal year 1999 are typical of the scope of effort for public drinking water.

St. Louis Regional Office - 146 unsafe bacteria samples investigated  
 Southeast Regional Office - 210 inspections of water system facilities  
 Southwest Regional Office - 156 water system operators attended training  
 Jefferson City Regional Office - 85 drinking water complaints investigated

For all violations, public water systems are required to notify the consumers they serve. The method of notification varies by the violation and system type. Systems must then report back to DNR how the public notice was performed. Some violations, such as the confirmed detection of fecal coliform bacteria or *E. coli*, warrant more immediate action due to the threat to public



health. For such acute violations, DNR requires systems to immediately notify their customers to boil their water before consumption. Boil water orders remain in effect until the problem has been corrected, and the water is safe to consume.

### **Variances and Exemptions**

Variances and exemptions are compliance tools used to ensure public water systems in violation of MCL standards return to compliance in a framework that protects the public health while allowing flexibility to solve a complicated problem. A variance is typically used when feasible technology or other means does not exist for a system to meet a regulation. Missouri, however, has not yet needed to use the variance as a compliance tool. An exemption is used to allow public water systems adequate time to evaluate the best available technology and other strategies to meet an MCL. Over the past several years, DNR has used the exemption to solve the problem of atrazine MCL exceedences at a number of surface water systems. In order for DNR to issue an exemption, these water systems typically had to commit a rigorous schedule of both additional treatment at the water plant (involving significant costs) and watershed management.

DNR granted one exemption in 1998, and that was to the city of Bucklin. This system initially exceeded the MCL for atrazine in 1997, but the violation technically continued into 1998. DNR pursued the exemption route with Bucklin to ensure the system in the future would be reliably and consistently in compliance with the MCL through treatment at the water plant and implementation of pesticide best management practices in the watershed of the Bucklin's drinking water impoundment. The exemption issued to Bucklin in 1998 expired August 17, 1999. Atrazine levels were well below detection limits all through 1999.

### **For Further Information**

Information regarding the contents of this report or related data on Missouri's public water systems can be obtained from the Missouri Department of Natural Resources, Public Drinking Water Program, P.O. Box 176, Jefferson City, MO 65102, or call 1-800-361-4827 or (573) 751-5331. You can also visit our Web/site at [www.dnr.state.mo.us/deq/pdwp/homepdwp.htm](http://www.dnr.state.mo.us/deq/pdwp/homepdwp.htm).

# Violations Table

**State:** Missouri

**Reporting Interval:**

Jan. 1, 1999-Dec. 31, 1999

	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
<b>Organic Contaminants</b>							
1,1,1-Trichloroethane	0.2					13	13
1,1,2-Trichloroethane	0.005					13	13
1,1-Dichloroethylene	0.007					13	13
1,2,4-Trichlorobenzene	0.07					13	13
1,2-Dibromo-3-chloropropane (DBCP)	0.0002						
1,2-Dichloroethane	0.005					13	13
1,2-Dichloropropane	0.005					13	13
2,3,7,8-TCDD (Dioxin)	3x10 <sup>-8</sup>						
2,4,5-TP	0.05						
2,4-D	0.07						
Acrylamide							
Alachlor	0.002						
Atrazine	0.003	4	2				

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		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Benzene	0.005					13	13
Benzo[a]pyrene	0.0002						
Carbofuran	0.04						
Carbon tetrachloride	0.005					13	13
Chlordane	0.002						
cis-1,2-Dichloroethylene	0.07					13	13
Dalapon	0.2						
Di(2-ethylhexyl)adipate	0.4						
Di(2-ethylhexyl)phthalate	0.006						
Dichloromethane	0.005					13	13
Dinoseb	0.007						
Diquat	0.02						
Endothall	0.1						
Endrin	0.002						

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		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Epichlorohydrin							
Ethylbenzene	0.7					13	13
Ethylene dibromide	0.00005	1	1				
Glyphosate	0.7						
Heptachlor	0.0004						
Heptachlor epoxide	0.0002						
Hexachlorobenzene	0.001						
Hexachlorocyclopentadiene	0.05						
Lindane	0.0002						
Methoxychlor	0.04						
Monochlorobenzene	0.1					13	13
o-Dichlorobenzene	0.6					13	13
Oxamyl (Vydate)	0.2						
para-Dichlorobenzene	0.075					13	13

# Violations Table

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	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Pentachlorophenol	0.001						
Picloram	0.5						
Simazine	0.004						
Styrene	0.1					13	13
Tetrachloroethylene	0.005					13	13
Toluene	1					13	13
Total polychlorinated biphenyls	0.0005						
Toxaphene	0.003						
Trans-1,2-Dichloroethylene	0.1					13	13
Trichloroethylene	0.005					13	13
Vinyl chloride	0.002					13	13
Xylenes (total)	10					13	13

# Violations Table

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	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Total trihalomethanes	0.10						

# Violations Table

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	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
<b>Inorganic Contaminants</b>							
<b>Antimony</b>	<b>0.006</b>					<b>14</b>	<b>14</b>
<b>Arsenic</b>	<b>0.05</b>					<b>14</b>	<b>14</b>
<b>Asbestos</b>	<b>7 million fibers/λ ≤μm long</b>						
<b>Barium</b>	<b>2</b>					<b>14</b>	<b>14</b>
<b>Beryllium</b>	<b>0.004</b>					<b>14</b>	<b>14</b>
<b>Cadmium</b>	<b>0.005</b>	<b>1</b>	<b>1</b>			<b>14</b>	<b>14</b>
<b>Chromium</b>	<b>0.1</b>					<b>14</b>	<b>14</b>
<b>Cyanide (as free cyanide)</b>	<b>0.2</b>					<b>14</b>	<b>14</b>
<b>Fluoride</b>	<b>4.0</b>					<b>14</b>	<b>14</b>
<b>Mercury</b>	<b>0.002</b>					<b>14</b>	<b>14</b>
<b>Nitrate</b>	<b>10(as Nitrogen)</b>						
<b>Nitrite</b>	<b>1 (as Nitrogen)</b>						

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		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Selenium	0.05					14	14
Thallium	0.002					14	14
Total nitrate and nitrite	10 (as Nitrogen)	3	3			70	70



# Violations Table

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Jan. 1, 1999-Dec. 31, 1999

	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
<b>Radionuclide MCLs</b>							
Gross alpha	15 pCi/λ	2	2			22	22
Radium-226 and radium-228	5 pCi/λ	1	1				
Gross beta	4 mrem/yr						
<b>Subtotal</b>		12	10			519	119

# Violations Table

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		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Total Coliform Rule							
Acute MCL violation	Presence	42	38				
Non-acute MCL violation	Presence	430	313				
Major routine and follow up Monitoring						1,006	587
Sanitary survey <sup>2</sup>							
Subtotal		472	351			1,006	587

# Violations Table

**State:** Missouri

**Reporting Interval:**

Jan. 1, 1999-Dec. 31, 1999

	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Surface Water Treatment							
Filtered systems							
Monitoring, routine/repeat							
Treatment techniques				20	14		
Unfiltered systems							
Monitoring, routine/repeat							
Failure to filter							
Subtotal				20	14		

# Violations Table

**State:** Missouri

**Reporting Interval:**

Jan. 1, 1999-Dec. 31, 1999

	MCL (mg/λ) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems with Violations
Lead and Copper Rule							
Initial lead and copper tap M/R						16	16
Follow-up or routine lead and copper tap M/R						41	41
Treatment installation							
Public education							
<b>Subtotal</b>						<b>57</b>	<b>57</b>

1. Values are in milligrams per liter (mg/λ), unless otherwise specified.
2. Number of major monitoring violations for sanitary survey under the Total Coliform Rule.

## Definitions for Summary of Violations Table

The following definitions apply to the Summary of Violations table.

**Filtered Systems:** Water systems that have installed filtration treatment [10 CSR 60-4.055].

**Inorganic Contaminants:** Non-carbon-based compounds such as metals, nitrates, and asbestos. These contaminants are naturally-occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. DNR has established MCLs for 15 inorganic contaminants [10 CSR 60-4.030].

**Lead and Copper Rule:** This rule established national limits on lead and copper in drinking water [10CSR 60-15.010]. Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures. States report violations of the Lead and Copper Rule are reported for the following six categories:

*Initial lead and copper tap M/R:* A violation where a system did not meet initial lead and copper testing requirements, or failed to report the results of those tests to the State.

*Follow-up or routine lead and copper tap M/R:* A violation where a system did not meet follow-up or routine lead and copper tap testing requirements, or failed to report the results.

*Treatment installation:* Violations for a failure to install optimal corrosion control treatment system or source water treatment system which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in both categories].

*Lead service line replacement:* A violation for a system's failure to replace lead service lines on the schedule required by the regulation.

*Public education:* A violation where a system did not provide required public education about reducing or avoiding lead intake from water.

**Maximum Contaminant Level (MCL):** The highest amount of a contaminant that DNR allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

**Monitoring:** DNR specifies which water testing methods the water systems must use, and sets schedules for the frequency of testing. A water system that does not follow DNR's schedule or methodology is in violation [10 CSR 60-4.010].

States must report monitoring violations that are significant as determined by the EPA Administrator and in consultation with the States. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period.

A major monitoring violation for the surface water treatment rule occurs when at least 90% of the required samples are not taken or results are not reported during the compliance period.

**Organic Contaminants:** Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. DNR has set legal limits on 54 organic contaminants that are to be reported [10CSR 60-4.040 and 4.100].

**Radionuclides:** Radioactive particles, which can occur naturally in water or result from human activity. DNR has set legal limits on four types of radionuclides: radium-226, radium-228, gross alpha, and beta particle/photon radioactivity [10 CSR 60-4.060]. Violations for these contaminants are to be reported using the following three categories:

*Gross alpha:* A violation for alpha radiation above MCL of 15 picocuries/liter. Gross alpha includes radium-226 but excludes radon and uranium.

*Combined radium-226 and radium-228:* A violation for combined radiation from these two isotopes above MCL of 5 pCi/L.

*Gross beta:* A violation for beta particle and photon radioactivity from man-made radionuclides above 4 millirem/year.

**Surface Water Treatment Rule:** The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [10 CSR 60-4.055]. Violations of the “Surface Water Treatment Rule” are reported for the following categories:

Monitoring, routine/repeat (for filtered systems): A violation for a system’s failure to carry out required tests, or to report the results of those tests.

Treatment techniques (for filtered systems): A violation for a system’s failure to properly treat its water.

**Total Coliform Rule (TCR):** The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause a short-term health problem. If no samples are collected during the one-month compliance period, a significant monitoring violation occurs. States are to report four categories of violations:

Acute MCL violation: A violation where the system found fecal coliform or E. Coli, potentially harmful bacteria, in its water, thereby violating the rule.

Non-acute MCL violation: A violation where the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform violation.

Major routine and follow-up monitoring: A violation where a system did not perform any monitoring. [One number is to be reported for the sum of the violations in these two categories.]

Sanitary Survey: A major monitoring violation if a system fails to collect 5 routine monthly samples if sanitary survey is not performed/

**Treatment Techniques:** A water disinfection process that EPA requires instead of a MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the Surface Water Treatment and the Lead and Copper Rules have also included in this category of violation for purposes of this report.

**Unfiltered Systems:** Missouri has required filtration of all surface water sources for many years. There are no unfiltered surface systems in Missouri and therefore no violations in this category.

**Violation:** A failure to meet any state or federal drinking water regulation.

## APPENDIX A

### Listing of Maximum Contaminant Level (MCL) violators for 1999.

#### I. Coliform MCL Violations

##### Acute

The following systems were under boil water orders due to acute MCL violations for fecal coliform or E. coli bacteria for the months listed. These acute violations also violate the standard for total coliform bacteria.

County	SUPPLY NAME	ID#	Month(s)	Issue Date	Rescind Date
BARRY	KENS SUGAR SHACK	MO5210653	April	4/23/1999	4/30/1999
BARRY	THE STEAK INN	MO5218163	August	9/2/1999	9/7/1999
BENTON	PECAN GROVE CAMPGROUND	MO3241403	September	10/8/1999	11/8/1999
CAMDEN	CAMELOT UTILITIES CO	MO3036183	December	12/21/1999	12/28/1999
CAMDEN	JOURNEY'S END MHP	MO3041273	April	4/1/1999	Open
CAMDEN	KERRS COUNTRY MART	MO3282390	May	5/20/1999	6/1/1999
CAMDEN	LAKE OZARK ZIP STOP	MO3292376	May July August	5/12/1999 8/9/1999 8/9/1999	5/28/1999 9/3/1999 9/3/1999
CAMDEN	PARK PLACE ON THE LAKE - OWC	MO3282326	March	4/1/1999	4/6/1999
CAMDEN	ST MORITZ ESTATES CONDO	MO3238024	June	7/12/1999	7/22/1999
CAMDEN	THE RAIL SPORTS BAR	MO3212418	August	8/23/1999	9/3/1999



**I. Coliform MCL Violations****Acute**

The following systems were under boil water orders due to acute MCL violations for fecal coliform or E. coli bacteria for the months listed. These acute violations also violate the standard for total coliform bacteria.

County	SUPPLY NAME	ID#	Month(s)	Issue Date	Rescind Date
CRAWFORD	COACHLIGHT INN	MO3190845	November	11/18/1999	11/29/1999
DOUGLAS	PLUMMER'S JUNCTION STORE AND CAFE	MO5211664	February	3/16/1999	Open
FRANKLIN	MERAMEC CAVERNS	MO6201448	March	4/2/1999	4/7/1999
GREENE	JUMP STOP #9	MO5292347	December	12/22/1999	12/27/1999
GREENE	NORTHWEST BAPTIST CHURCH	MO5272307	October	10/28/1999	11/2/1999
			December	12/22/1999	12/30/1999
GREENE	WEE CARE DEVELOPMENT	MO5271861	August	8/23/1999	11/4/1999
HICKORY	COOPER COVE RESORT	MO5210919	May	6/4/1999	6/8/1999
HICKORY	KEN HAVEN SUBD	MO5251510	August	8/31/1999	9/9/1999
IRON	ARCADIA	MO4010023	November	11/5/1999	11/9/1999
JEFFERSON	SUNRISE LAKES SUBD	MO6036080	July	8/4/1999	9/28/1999
LACLEDE	BENNETT SPRINGS STATE PARK	MO5120148	May	5/21/1999	5/25/1999
LAWRENCE	COUNTRY JUNCTION STORE	MO5258127	May	5/18/1999	5/24/1999

**I. Coliform MCL Violations****Acute**

The following systems were under boil water orders due to acute MCL violations for fecal coliform or E. coli bacteria for the months listed. These acute violations also violate the standard for total coliform bacteria.

<b>County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>	<b>Issue Date</b>	<b>Rescind Date</b>
MILLER	LAKE OF THE OZARKS STATE PARK	MO3120160	June	6/15/1999	6/18/2000
MONTGOMERY	MIDDLETOWN	MO6010521	December	12/21/1999	12/29/1999
PETTIS	SUNSET MOTEL	MO3190846	September	10/5/1999	10/8/1999
PULASKI	ST ROBERT	MO3010720	September	9/22/1999	9/28/1999
STONE	FLAT CREEK RESORT AND RESTAURANT	MO5191681	March	11/25/1998	4/12/1999
STONE	INDIAN HILLS HOMEOWNERS ASSOC	MO5036272	June	6/23/1999	7/1/1999
STONE	MC CORD BEND UTILITY CO	MO5036205	June	6/1/1999	10/5/1999
			July	6/1/1999	10/5/1999
STONE	STARLIGHT VILLAGE	MO5030473	October	10/29/1999	11/12/1999
STONE	TRACE HOLLOW ONE STOP	MO5291421	February	3/11/1999	4/12/1999
TANEY	DINNER BELL	MO5212440	December	12/16/1999	12/22/1999

**I. Coliform MCL Violations****Acute**

The following systems were under boil water orders due to acute MCL violations for fecal coliform or E. coli bacteria for the months listed. These acute violations also violate the standard for total coliform bacteria.

<b>County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>	<b>Issue Date</b>	<b>Rescind Date</b>
TANEY	EMERALD POINTE	MO5031148	October	10/22/1999	10/26/1999
TANEY	FIVE SEASONS MHP	MO5041214	July	7/22/1999	12/9/1999
TANEY	KANAKUK KOUNTRY	MO5248292	June	7/8/1999	7/12/1999
TANEY	MOORE BEND SUBD	MO5036117	February	3/4/1999	3/11/1999
TANEY	TANEYCOMO RESORT	MO5191032	January	2/2/1999	2/5/1999
TANEY	TANGLEWOOD RESORT	MO5191030	December	12/16/1999	1/13/2000

## APPENDIX A

### Listing of monthly non-acute Total Coliform Maximum Contaminant Level (MCL) violators for 1999.

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
ATCHISON	ROCK PORT	MO1010696	August
BARRY	BUTTERFIELD	MO5010119	October November
BARRY	CRESTWOOD WEST SUBD	MO5036196	October
BARRY	EAGLE ROCK RESORT MOTEL	MO5190890	June
BARRY	ELMO SUBDIVISION #1	MO5031087	August September
BARRY	JENKIN'S QUICK STOP	MO5292405	April
BARRY	KENS SUGAR SHACK	MO5210653	April June July August
BARRY	KINGS RIVER PINES	MO5250543	June July August
BARRY	KNOB HILL ACRES	MO5036182	August
BARRY	NOAHS ARK	MO5272433	September
BARRY	REX'S FAMILY RESTAURANT	MO5212349	July
BARRY	SHORELINE CAMPGROUND & RESORT	MO5241299	July

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
BARRY	SOUTHWEST RURAL WATER DISTRICT #1	MO5021116	November
BARRY	THE STEAK INN	MO5218163	August
BARRY	UNCLE ROY'S	MO5291283	May June
BATES	BATES CO PWSD #3	MO1024032	September
BENTON	CAMP OAKLEDGE	MO3242005	February
BENTON	DAR'S CAFE	MO3210344	June
BENTON	EAGLES NEST RV RESORT	MO3241430	January
BENTON	HEITS POINT LUTHERAN CAMP	MO3242078	May
BENTON	LAKE HILLS MH/RV PARK	MO3040761	March
BENTON	LAKE HILLS MOTEL & RESTAURANT	MO3210904	September
BENTON	LAKESIDE RESORT	MO3190082	July
BENTON	PECAN GROVE CAMPGROUND	MO3241403	September
BENTON	QUARTER HOUSE	MO3211306	March
BENTON	THE STATION BAIT & TACKLE	MO3290254	March
BENTON	WHITEBRANCH SUBD	MO3036113	July
BOONE	BON GOR LAKE ESTATES	MO3036153	November
BOONE	BOONE CO CONS PWSD #1	MO3024055	June

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
BOONE	LES BOURGEOIS	MO3212387	February
CALLAWAY	MOC 1 TRAVEL PLAZA	MO3290603	August September October
CAMDEN	AMERICAN MOTOR INN	MO3191702	September
CAMDEN	BARRYS Z-7 MART	MO3292426	October
CAMDEN	CAFE 54	MO3210248	June
CAMDEN	CAMELOT UTILITIES CO	MO3036183	December
CAMDEN	COMFORT INN	MO3190958	September October November
CAMDEN	CRICKETS BAR & GRILL	MO3218005	October November
CAMDEN	DEEPWATER INN	MO3198084	August
CAMDEN	DOMENICO'S RESTAURANT &	MO3218186	July
CAMDEN	GLAIZE BRIDGE SHOPPING CENTER	MO3258200	June September
CAMDEN	GOLDEN REEF CONDOMINIUMS	MO3238009	February
CAMDEN	GRANADA RESORT	MO3198113	July
CAMDEN	HAPPY FISHERMAN	MO3211107	July
CAMDEN	HOOK AND HOOF RESTAURANT	MO3212374	April June December

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
CAMDEN	JOURNEY'S END MHP	MO3041273	February March April May June July
CAMDEN	KALFRAN LODGE	MO3190702	June
CAMDEN	KERRS COUNTRY MART	MO3282390	May
CAMDEN	LAKE BREEZE RESORT	MO3190784	June
CAMDEN	LAKE CHATEAU	MO3191540	September
CAMDEN	LAKE OZARK ZIP STOP	MO3292376	May June July August
CAMDEN	LAKEVIEW BEACH RESORT	MO3191521	May
CAMDEN	LINN CREEK	MO3010471	January
CAMDEN	LONE OAK POINT RESORT	MO3190708	July September
CAMDEN	MAKALU ESTATES	MO3031208	June
CAMDEN	NEW TRIBES LANGUAGE INST	MO3281045	September
CAMDEN	OSAGE BEACH - PASSEOVER	MO3011271	February
CAMDEN	OSAGE BEACH ZIP	MO3258189	August September October

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
CAMDEN	OSAGE HERITAGE CONDO	MO3238092	May
CAMDEN	OSAGE WATER COMPANY	MO3036220	June
CAMDEN	OZARK CARE CENTER	MO3069087	July
CAMDEN	PARK PLACE ON THE LAKE - OWC	MO3282326	March
CAMDEN	PONDEROSA SUBDIVISION	MO3031261	September October December
CAMDEN	PORT O CALL CONDOMINIUMS	MO3238191	June  September
CAMDEN	POVERTY FLATS VILLAGE	MO3258106	September
CAMDEN	ST MORITZ ESTATES CONDO	MO3238024	June
CAMDEN	STANDING ROCK CAMPGROUND	MO3248201	August
CAMDEN	THE RAIL SPORTS BAR	MO3212418	August
CAMDEN	THE SALTY DOG	MO3190729	April
CAMDEN	THREE SEASONS	MO3190750	November
CAMDEN	TIMES SQUARE, OWC	MO3258095	January
CAPE GIRARDEAU	COUNTRY VILLAGE ESTATES SUBD	MO4030275	December
CAPE GIRARDEAU	NORTH HILLS ESTATES	MO4036144	March
CAPE GIRARDEAU	ROLLING HILLS SUBD	MO4036264	July September



<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
CEDAR	FRIENDSHIP HILLS	MO5031165	October
CEDAR	UMBERLAND SUBDIVISION	MO5250889	February
CHRISTIAN	BRAMBLEWOOD GROUP HOME	MO5281373	May
CHRISTIAN	CLEVER	MO5010175	August
CHRISTIAN	PIPPENVILLE & OAK PARK OWNERS ASSOC	MO5036305	September
CHRISTIAN	QUAIL RUN WATER & LAND CO	MO5036313	August
CHRISTIAN	SUNSET HEIGHTS SUBD BLOCK I	MO5036063	July September
CHRISTIAN	SUNSET HEIGHTS SUBD WELL-2 BLOCK 2	MO5036092	July
CHRISTIAN	TWIN RIDGES PARK INC	MO5048032	May
CLAY	CLAY CO PWSD #8	MO1024149	August
COLE	ALGOA CORRECTIONAL	MO3069007	June July
COLE	COLE CO PWSD #1	MO3024159	October
COLE	E & M MHP	MO3048266	July
COOPER	BUNCETON	MO3010115	December
COOPER	QT INN	MO3190791	July October November
CRAWFORD	COACHLIGHT INN	MO3190845	November

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
CRAWFORD	CRAWFORD CO PWSD	MO6036037	October
CRAWFORD	CUBA	MO6010200	March
CRAWFORD	GARRISON'S CAMPGROUND & CANOE RENTAL	MO3241036	June
CRAWFORD	HUZZAH VALLEY STABLES, INC	MO3240880	August
CRAWFORD	INDIAN SPRINGS	MO6192136	August
CRAWFORD	ONONDAGA CAVE	MO6122199	July
CRAWFORD	STEELVILLE	MO6010759	August
DADE	DADEVILLE	MO5010202	January February
DADE	EVERTON	MO5010259	November
DALLAS	JO'S CONVENIENCE STORE	MO5291366	January
DALLAS	MR ED'S DRIVE IN	MO5218053	July
DALLAS	URBANA	MO5010807	February
DENT	DENT CO PWSD #1	MO4024196	June
DENT	OAK HILL ELEM SCHOOL	MO4171148	September
DENT	SALEM WOOD PRODUCTS	MO4182302	August October
DOUGLAS	PLUMMER'S JUNCTION STORE AND CAFE	MO5211664	February

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
FRANKLIN	CAMP MO-VAL/CAMP TAMBO	MO6241626	September
FRANKLIN	EVERGREEN LAKE ESTATES	MO6036134	September
FRANKLIN	FR. JAKLE HOME	MO6282353	January April November
FRANKLIN	GENCORP	MO6181289	July
FRANKLIN	HILLSIDE ACRES SUBD	MO6036135	August
FRANKLIN	LAURA MEADOWS APARTMENTS	MO6031090	May
FRANKLIN	MERAMEC CAVERNS	MO6201448	February March
GENTRY	ALBANY	MO1010006	October
GREENE	ACRES OF SHADE MHP	MO5048082	July
GREENE	AMERICAN LEGION POST 676	MO5218149	May
GREENE	GREENE HILLS WATER ASSOC	MO5031115	September
GREENE	HILLBILLY BILLS INC	MO5292389	May
GREENE	JUMP STOP #9	MO5292347	December
GREENE	MOONEY'S CASH N DASH	MO5258313	June
GREENE	NORTHWEST BAPTIST CHURCH	MO5272307	October December
GREENE	OZARK TRAVEL STOP	MO5212062	July August

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
GREENE	PLAYERS SOFTBALL COMPLEX	MO5208057	May July
GREENE	SHADY ACRES MHP	MO5048013	July August
GREENE	SILERS SHADY ACRES GOLF COURSE	MO5208040	November
GREENE	SILVER BELL MOBILE HOME PARK	MO5048145	September
GREENE	VILLAGE WEST MHP	MO5048166	July November
GREENE	WEE CARE DEVELOPMENT	MO5271861	August September
HENRY	SKY VILLAGE	MO1031166	February
HENRY	TEBO CREEK LODGE	MO1209001	July
HICKORY	CARSON CORNER LODGE	MO5212091	June
HICKORY	COOPER COVE RESORT	MO5210919	May
HICKORY	FUGATE MOBILE HOME PARK	MO5238302	September
HICKORY	GOODY'S RESORT	MO5190914	May
HICKORY	KEN HAVEN SUBD	MO5251510	August
HICKORY	LAKE FOREST SUBDIVISION	MO5036203	May July August
HICKORY	WINDMILL POINT	MO5251481	May

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
HICKORY	WINDMILL POINT	MO5251481	June August October
HOWELL	VALLEY PARK MHP	MO4041188	February
IRON	ARCADIA	MO4010023	November
JASPER	BALLARD'S CAMPGROUND	MO5241754	July
JASPER	BRIARBROOK SUBD	MO5036006	February
JASPER	COUNTRY CLUB MHP	MO5048210	October
JASPER	DUENWEG	MO5010227	December
JASPER	NICKORBOBS TEA ROOM	MO5212362	November December
JEFFERSON	BRIARWOOD LAKE DEVELOPMENT	MO6031110	December
JEFFERSON	ENGLE RIDGE VILLAGE SUBDIVISION	MO6030365	August
JEFFERSON	JEFFERSON CO PWSD #6	MO6024298	July August
JEFFERSON	LAKE CATTAILS SUBD	MO6036161	February March
JEFFERSON	PAESANOS PIZZA	MO6212370	December
JEFFERSON	SCOTSDALE SUBD	MO6036062	August
JEFFERSON	SUMMERSET SUBD	MO6036031	April
JEFFERSON	SUNRISE LAKES SUBD	MO6036080	July August

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
JEFFERSON	VALLEY VIEW APTS	MO6036213	June
JOHNSON	BARLOW'S TRAILER COURT	MO1041099	July
JOHNSON	KNOB NOSTER	MO1010432	June
LACLEDE	BENNETT SPRINGS STATE PARK	MO5120148	May
LACLEDE	LACLEDE CO PWSD #1	MO5024317	February
LAWRENCE	COUNTRY JUNCTION STORE	MO5258127	May
LAWRENCE	HONEYCREEK GOLF CLUB	MO5218165	September
LAWRENCE	JOE'S JUNCTION	MO5292361	August December
LAWRENCE	MICKEY OWEN BASEBALL SCHOOL	MO5248067	July
LAWRENCE	THREE V	MO5231809	October
LINCOLN	AUTUMN HILLS MHP	MO6041229	February May
LINCOLN	CUIVRE RIVER STATE PARK	MO6120055	April May
LINCOLN	ELSBERRY	MO6010250	June
LINCOLN	LAKEVIEW SUBD WATER SYSTEM	MO6036217	October
LINCOLN	TIMBER RIDGE ESTATES	MO6031217	August
MARIES	MARTIN SUBDIVISION	MO3031246	August
MCDONALD	KINGS C STORE	MO5290183	September

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
MCDONALD	LONGVIEW GROCERY & SUPPLY	MO5211762	April
MCDONALD	STEAK OUT	MO5211235	August
MILLER	BROOKVIEW APARTMENTS	MO3079510	May November
MILLER	HOLIDAY INN	MO3190813	July
MILLER	LAKE OF THE OZARKS STATE PARK	MO3120160	June
MILLER	LAKE VILLAGE SUBD WELL O WNERS ASSN INC	MO3231548	September
MILLER	LAKESIDE VILLAGE	MO3010444	January
MILLER	MAJESTIC OAKS PARK	MO3248174	April
MILLER	MILLER CO R-III SCHOOLS	MO3171263	May
MILLER	REGATTA LANES	MO3202344	April
MILLER	STAR CAFE	MO3210836	September
MISSISSIPPI	CHARLESTON	MO4010160	September
MONITEAU	CLARKSBURG	MO3010166	August
MONTGOMERY	KWIK STORE #5	MO3291410	July
MONTGOMERY	LAZY DAY CAMPGROUND	MO6241534	October
MONTGOMERY	MIDDLETOWN	MO6010521	September December
MONTGOMERY	MINEOLA REST AREA	MO6130523	October

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
MONTGOMERY	MINEOLA REST AREA	MO6130523	November
MONTGOMERY	RUNWAY ESTATES WATER ASS N	MO3041282	May July August September November
MONTGOMERY	STEAMBOAT JUNCTION	MO3242073	August
MORGAN	BEAUTY VIEW RESORT	MO3192316	July
MORGAN	BLUE ANCHOR	MO3230855	August
MORGAN	FOREST HILLS SUBD	MO3036159	January
MORGAN	RAIL FENCE CAFE	MO3211428	August October
MORGAN	STILLWATER SUBDIVISION	MO3031259	May June July August September December
MORGAN	VERSAILLES	MO3010819	August
NEW MADRID	MARSTON	MO4010504	July
NEW MADRID	NEW MADRID CO PWSD #5	MO4024419	June
NEWTON	FOUR STATES SNACK BAR	MO5281260	December
NEWTON	MC DONALDS #8201	MO5212102	May June
NEWTON	STELLA	MO5010760	September



<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
OSAGE	META	MO3010517	November
OSAGE	OSAGE CO PWSD #2-NORTH	MO3024438	October November
OZARK	DORA R-III SCHOOLS	MO5171207	October
OZARK	EAST WIND COMMUNITY	MO5079504	September
OZARK	ON THE RUN PIZZA & SUBS	MO5212330	January
OZARK	ROYS STORE	MO5292331	June December
OZARK	TWIN FORKS RESORT	MO5190867	September
PEMISCOT	HOLLAND	MO4010372	June
PETTIS	HILLCREST MHP	MO3048044	August
PETTIS	PIT STOP CAFE	MO3218188	January February June July August
PETTIS	STARDUST MOTOR INN	MO3190887	July
PETTIS	SUNSET MOTEL	MO3190846	September
PHELPS	DOOLITTLE I-44 REST AREA	MO3130528	April May June
PHELPS	SUGAR TREE CLUB	MO3031211	November

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
PHELPS	USFS-LANE SPRING REC AREA	MO3100011	June September
POLK	CAMP WAKAHNI-CAMP FIRE CAMP	MO5248066	August
POLK	HUMANSVILLE	MO5010387	October December
PULASKI	BLUFF VIEW APARTMENTS	MO3302411	June July
PULASKI	RICHLAND DIVERSIFIED INDUSTRY	MO3180637	January February
PULASKI	ST ROBERT	MO3010720	September
REYNOLDS	DOE RUN COMPANY-WEST FOR K	MO4182221	August
RIPLEY	USFS-FLOAT CAMP CAMPGROUND	MO4102223	September October
RIPLEY	USFS-FLOATCAMP PICNIC GROUND	MO4100026	July
SCOTT	C O'S MARKET	MO4258556	June
SCOTT	TOWER ROCK QUARRY	MO4180590	August
ST CHARLES	CHEROKEE LAKES	MO6240106	June October
ST CHARLES	ST JUDES SUBD	MO6036002	January
ST CLAIR	CLEARVIEW DAY CARE & PRE SCHOOL	MO5170218	July
ST CLAIR	JUMP STOP #8	MO5212119	September October

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
ST CLAIR	LOWRY CITY	MO5010480	September
ST CLAIR	OLD PLANTATION MOTEL & BAR B Q	MO5212121	May July
ST FRANCOIS	C.B. JOE'S BBQ	MO4211557	September
ST FRANCOIS	PARK HILLS	MO4010279	June
ST LOUIS	GREENSFELDER COUNTY PARK	MO6162373	July
ST LOUIS	MARIANIST RETREAT CENTER	MO6281482	January
ST LOUIS	PARADISE VALLEY GOLF & COUNTRY	MO6200551	August
ST LOUIS	WEST TYSON COUNTY PARK	MO6202439	September
ST LOUIS	WILDHORSE AMOCO	MO6291618	September October
STE GENEVIEVE	LAKE FOREST ESTATES	MO4036146	September
STE GENEVIEVE	WINDS OF MEADOWVIEW	MO4211581	January
STONE	AKERS MOBILE HOME PARK	MO5048011	August
STONE	AUNT'S CREEK DEV 1ST ADDITION	MO5041140	December
STONE	BEST WESTERN KIMBERLING ARMS	MO5190975	August
STONE	BRIAR CLIFF SUBDIVISION	MO5031104	January

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
STONE	BUTTERMILK SPRINGS WATER ASSOC	MO5031125	August
STONE	CAPE FAIR MOBILE HOME & RV PARK	MO5241195	March
STONE	CRANE	MO5010192	September
STONE	FLAT CREEK RESORT AND RESTAURANT	MO5191681	March April
STONE	GOBBLERS MOUNTAIN ADDITION	MO5036170	May
STONE	HOOT OWL POINT	MO5036076	August
STONE	HUNTERS GLEN ESTATES	MO5031176	November
STONE	INDIAN HILLS HOMEOWNERS ASSOC	MO5036272	June October
STONE	INDIAN TRAILS RESORT	MO5190968	August
STONE	MAPLE HILL RESTAURANT	MO5211927	January
STONE	MC CORD BEND UTILITY CO	MO5036205	June July September
STONE	MEADOW HILLS SUBDIVISION	MO5031142	December
STONE	MILL CREEK SHORES SUBD	MO5031254	March June
STONE	MILLWOOD ESTATES PROPERTY OWNERS ASSN	MO5031278	September October

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
STONE	NOTCH INN AND ESTATES	MO5190959	January
STONE	OAK SHADOWS WATER ASSOC	MO5036250	June
STONE	PAPOULIS	MO5218160	September
STONE	PIZZA CHEF SOUTH	MO5258136	May June
STONE	SCOTTSDALE SUBDIVISION	MO5036353	May
STONE	SHORE ACRES RESORT	MO5199988	July
STONE	SLEEPY HOLLOW RESORT	MO5191934	August September
STONE	SOUTHPORT CONDOMINIUMS	MO5071255	September
STONE	STARLIGHT VILLAGE	MO5030473	August October
STONE	STONEBRIDGE WEST SUBD	MO5036201	November
STONE	SUNDOWN PROPERTY OWNERS ASSOC	MO5191686	July
STONE	SYCAMORE LANDING ASSOC	MO5036253	October November
STONE	TABLE ROCK ESTATES SUBD	MO5036232	August

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
STONE	TRACE HOLLOW ONE STOP	MO5291421	February
STONE	TRAILS END RESORT & RV PARK	MO5191959	October
STONE	TURNER ESTATES SUBD	MO5036312	October
STONE	WISHWOOD RESORT	MO5190982	October
STONE	WOOD RIDGE ESTATES	MO5036071	July
TANEY	COOPER CREEK	MO5191022	June July
TANEY	DINNER BELL	MO5212440	December
TANEY	EMERALD POINTE	MO5031148	September October November December
TANEY	FIVE SEASONS MHP	MO5041214	July August September October November
TANEY	FORSYTH RES CARE CENTER	MO5069031	January June November
TANEY	HIDDEN RIDGE ESTATES MHP	MO5041129	October
TANEY	KANAKUK KOUNTRY	MO5248292	June
TANEY	LAKE TANEYCOMO WOODS	MO5036012	February
TANEY	LAKEVIEW SUBD BLOCK C	MO5036268	May

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
TANEY	MOORE BEND SUBD	MO5036117	February
TANEY	SHADY ACRES RV & MOBILE HOME	MO5048212	August
TANEY	STONECROFT CONFERENCE CENTER	MO5271012	July
TANEY	TANEYCOMO HIGHLANDS SUBD INC	MO5031159	December
TANEY	TANEYCOMO RESORT	MO5191032	January
TANEY	TANGLEWOOD RESORT	MO5191030	December
TANEY	TOP OF THE ROCK GOLF COURSE	MO5202075	June
TANEY	TWILITE HOME SITES	MO5031277	August September
TANEY	TWIN ISLAND RESORT	MO5191062	October
TANEY	VICKERY RESORT MOTEL	MO5191008	August September
VERNON	SCHELL CITY	MO5010725	April
WARREN	CHILD EVANGELISM FELLOWSHIP	MO6172277	December
WARREN	EMMAUS HOMES, INC	MO6069070	March
WARREN	MAPLE RIDGE MHP	MO6048138	May
WARREN	WARRENTON	MO6010834	August November
WASHINGTON	BELGRADE ELEM SCHOOL	MO6171240	February

<b>Non-acute County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
WASHINGTON	PEA RIDGE IRON ORE COMPANY INC	MO6180563	January
WASHINGTON	POTOSI	MO6010659	January September
WASHINGTON	THUNDERBIRD MHP	MO4040818	July
WASHINGTON	WASHINGTON STATE PARK	MO6120173	April May
WAYNE	CHAONIA OLD TOWN INN	MO4211563	June
WAYNE	CLEARWATER-RIVER ROAD- 09C	MO4110135	October
WAYNE	MILL SPRING	MO4010527	May
WAYNE	WA'PELLO RES-HOLLIDAY	MO4112033	December
WEBSTER	CONWAY REST AREA	MO5130529	August
WEBSTER	CROSSCUT/KIDS/COACH LIGHT LANES	MO5281419	December
WEBSTER	MIDWEST PRODUCTS, INC.	MO5181657	January
WEBSTER	OAK RIDGE ESTATES	MO5041266	April May
WEBSTER	SEYMOUR	MO5010734	September October November
WRIGHT	MANES R-V ELEM SCHOOL	MO5171242	November



## **II. Chemical MCL Violations**

<b>County</b>	<b>Supply Name</b>	<b>ID#</b>	<b>Chemical</b>
DAVIESS	JAMESPORT	MO1010406	Atrazine
JEFFERSON	DESOTO	MO6010213	Cadmium, Dissolved
JEFFERSON	GRANDVIEW ELEM	MO6171561	1,2-Dibromoethane
PERRY	BUCHHEIT INC	MO4181392	Nitrate + Nitrite as N
PLATTE	DEARBORN	MO1010204	Atrazine
RIPLEY	NAYLOR	MO4010557	Nitrate + Nitrite as N
STONE	ANTLER'S RESORT &	MO5190933	Nitrate + Nitrite as N

## **II. Radionuclide MCL Violations**

<b>County</b>	<b>Supply Name</b>	<b>ID#</b>	<b>Radionuclide</b>
LINCOLN	AUTUMN HILLS MHP	MO6041229	Gross Alpha
LINCOLN	CHARWOOD ESTATES	MO6041073	Gross Alpha
ST FRANCOIS	FARMINGTON	MO4010270	Combined Radium

### III. Surface Water Treatment

The following systems violated the Surface Water Treatment Technique for Turbidity in the months indicated.

County	SUPPLY NAME	ID#	Month(s)
BATES	RICH HILL	MO1010682	April March
CASS	ARCHIE	MO1010024	July
CASS	CLEVELAND	MO1010174	January July March
CASS	DREXEL	MO1010225	January July
CLAY	SMITHVILLE	MO1010748	May
CLINTON	PLATTSBURG	MO1010648	January
GRUNDY	TRENTON	MO2010796	October
KNOX	EDINA	MO2010238	May October
LINN	BROOKFIELD	MO2010105	June
MONTGOMERY	WELLSVILLE	MO6010848	January September
PERRY	PERRYVILLE	MO4010636	December
PIKE	BOWLING GREEN	MO2010093	December
PLATTE	DEARBORN	MO1010204	October
ST CHARLES	AMEREN U.E.- SIOUX PLANT	MO6182215	February

## APPENDIX B

### Monitoring Violations - Chronic

The following systems had 3 or more major monitoring violations of the Total Coliform Rule in 1999 and have been listed on previously issued news releases for chronic monitoring violations.

County	SUPPLY NAME	ID#	Month(s)
Barry	Ayers Corner Shopping Center	MO5291423	February April July August September November December
Barry	Jenkins Quick Stop	MO5292405	May June August October November December
Barry	Raymond's Mexican Food	MO5211229	February May June October November December
Barry	Rex's Family Restaurant	MO5212349	January May June September October November
Barton	Burgess	MO5011124	January February March April

## Monitoring Violations Chronic

County	SUPPLY NAME	ID#	Month(s)
Barton	Burgess	MO5011124	May
Benton	Roadhouse Restaurant and RV Park	MO3210552	March June November
Butler	Town & Country Apts.	MO4031156	March April May June
Camden	Dewey's Lounge	MO3258194	May June July August October December
Camden	Eclipse	MO3258315	January February December
Camden	Granada Resort	MO3198113	June June September October
Camden	Shooter's Restaurant and Marina	MO3218101	June July September October

**Monitoring Violations Chronic**

<b>County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
Camden	The Rail Sports Bar	MO3212418	June July October
Camden	Time Out C-Store	MO3292348	January March April August October
Christian	Spokane Handy Mart	MO5291585	May August October December
Cooper	QT Inn	MO3190791	January February April May
Dallas	Fraternal Order of Eagles	MO5218054	July October November
Franklin	VFW Post 2482	MO6191843	March May November
Franklin	Village Inn	MO6212407	April May July September

**Monitoring Violations Chronic**

<b>County</b>	<b>SUPPLY NAME</b>	<b>ID#</b>	<b>Month(s)</b>
Franklin	Village Inn	MO6212407	October November
Greene	Church of the Harvest	MO5271629	February March September
Henry	Tebo Creek Lodge	MO1209001	May October December
Jefferson	Engle Ridge Village	MO6030365	January February May
Johnson	Forest Trails Estates	MO1048196	May June July October December
Laclede	Rolling Acres MHP	MO5041295	September October November December
Lawrence	Joe's Junction	MO5292361	February July November

## Monitoring Violations Chronic

County	SUPPLY NAME	ID#	Month(s)
Lincoln	Joan's Chain of Events	MO6211458	July August September October November December
Lincoln	Shenandoah Stables	MO6202342	January February April May June July September
Madison	Continental Restaurant	MO4211137	July August November December
Maries	Moreland's Restaurant and	MO3211025	March August November
Miller	Port Arrowhead Marina	MO3230669	May July December
New Madrid	North Lilbourn	MO4010581	January February March April May



## Monitoring Violations Chronic

County	SUPPLY NAME	ID#	Month(s)
Newton	Oak Grove Baptist Church	MO5271599	February March April May July August September November December
Ozark	Lakeside One Stop	MO5192392	February March April May July August September
Pettis	Super 7 Motel	MO3190893	May September December
Polk	Country House Restaurant	MO5210534	April May August September
Polk	Love's Gas and Grocery	MO5258125	January May June
Scott	Haywood City	MO4010971	April May August September

## Monitoring Violations Chronic

County	SUPPLY NAME	ID#	Month(s)
Scott	Haywood City	MO4010971	October November December
St. Francois	Farmington Amvets Post 113	MO4250576	July August September December
St. Louis	Wildhorse Amoco	MO6291618	January March May
Stone	B & D Water & Homeowners Assoc	MO5030582	October November December
Stone	Pizza Chef South	MO5258136	March April October October
Stone	Wagner's One Stop	MO5290224	May September December
Taney	160 Café	MO5211163	February June July August September October November

## Monitoring Violations Chronic

County	SUPPLY NAME	ID#	Month(s)
Taney	160 Café	MO5211163	December
Taney	Blue Ridge Estates Subd.	MO5031298	October November December
Taney	Hitch-N-Post General Store	MO5211978	January February June
Warren	Prairie Meadows Estates	MO6031216	January February September October November December
Washington	L & M MHP	MO4041275	April June July August October November December
Wright	The Brandin' Iron	MO5218161	September November December

## APPENDIX C

### Major Repeat Monitoring Violations

The following systems had major repeat monitoring violations for the months listed. A major repeat monitoring violation occurs when a routine sample tests positive for total coliform bacteria and a system then fails to submit any follow-up, or repeat, samples as required.

County	SUPPLY NAME	ID#	Month(s)
CAMDEN	GREENVIEW BUSINESS ASSOC	MO3180363	December
CAMDEN	SWISS VILLAGE CONDO	MO3238050	April
IRON	PILOT KNOB RURAL WATER DIST #1 N	MO4020601	December
IRON	PILOT KNOB RURAL WATER DIST #1 S	MO4020602	December
JEFFERSON	GREEN ACRES MHP	MO6048012	December
JEFFERSON	LAKE CATTAILS SUBD	MO6036161	June
JEFFERSON	VALLEY VIEW APTS	MO6036213	May
JEFFERSON	WARE LAKE SUBD	MO6036148	January
JEFFERSON	WARREN WOODS SUBD	MO6036084	February
MILLER	STAR MOTEL	MO3191544	September
PHELPS	SUGAR TREE CLUB	MO3031211	September